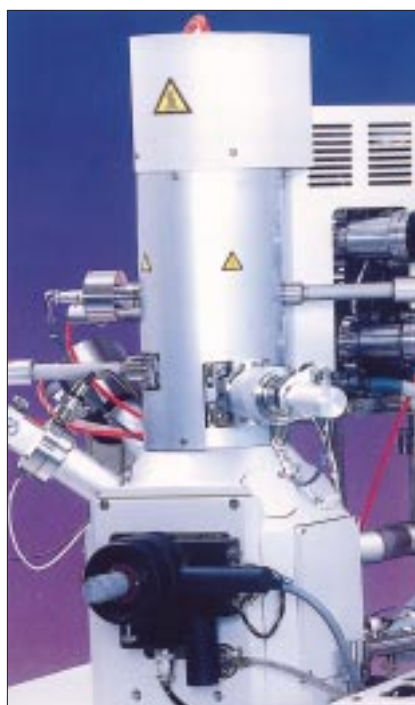


## Product News

### Ion beam milling system



The **FB-2000A** focused ion beam system from **Hitachi Scientific Instruments** offers significant benefits over conventional ion beam milling systems. The instrument not only offers built-in imaging capabilities, but also complete sample handling compatibility with Hitachi transmission electron microscopes (TEMs), scanning transmission electron microscopes (STEMs) or scanning electron microscopes (SEMs). This greatly speeds up sample processing and examination. Ion beam milling techniques play a particularly important role in semiconductor applications. This makes the compatibility with the HD-2000 STEM particularly important for studies of the inner structures of semiconductor devices.

Circle number 1 on reader response card.

### In Brief

#### Optical biosensor

Virus-like particles (VLPs) are multimeric intracellular proteins assembled from fusion proteins and expressed as hybrid particles by *Saccharomyces cerevisiae*. They are used as a framework for a range of biological products, including vaccines, diagnostics, research agents and therapeutics. The **IASys** optical biosensor from **Affinity Sensors** was used successfully to perform real-time bioprocess monitoring of VLP concentration for rapid process optimisation. Conditions for monitoring purified VLP were optimised by using a planar biosensor surface.

Circle number 4 on reader response card.

#### Brewing research analysis

The benefits of automatically shaking samples, as opposed to less reliable manual methods, have been welcomed at BRI – Brewing Research International – following their investment in a **Gerhardt Laboshake** machine. Over the years several shakers have been evaluated with respect to their performance in measuring bitterness by extraction into iso-octane. The method requires a robust and reliable shaker, in particular a machine with a 5 cm throw rather than the usual shorter throw of 1–2 cm.

Circle number 5 on reader response card.

### Caspase protease detection



Caspase-1 (ICE) and Caspase-3 (CPP32), cysteine aspartic acid specific proteases, have been shown to play key roles in inflammation and apoptosis in mammalian cells. **Turner Designs' TD-360 Mini-Fluorometer** combined with **Promega Corporation's CasPACE™ Assay System** provide a highly sensitive, quantitative measurement of both ICE and Cpp32 protease activities. The TD-360 provides sensitivity down to nM concentrations of AMC (7-amino-4-methylcoumarin) standard and has at least 4 decades of range.

Circle number 2 on reader response card.

### Hybridization oven



**UVP** has released its new **HB-1000 Hybridizer** which creates the ideal environment for nucleic acid hybridization. This hybridizer is designed for creating conditions needed for cDNA library screenings, primer synthesis and all nucleic acid hybridization. Bringing together precise microprocessor-controlled temperature settings and dynamic mixing features, the HB-1000 provides accurate and ideal hybridization conditions. Adjustable rotation speeds let the researcher find the optimum mixing conditions for any application.

Circle number 3 on reader response card.

#### Real-time version of LabVIEW

**National Instruments** have released **LabVIEW RT**, a real-time version of LabVIEW and a series of intelligent data acquisition (DAQ) boards, the **RT Series**, for real-time control using Microsoft Windows-based computers. LabVIEW RT takes advantage of the standard LabVIEW development paradigm and, through a simple pull-down menu command, instantly embeds complete programs on the dedicated processor of a National Instruments RT Series data acquisition board for real-time performance. LabVIEW RT will continue to run even if the operating system on the host PC crashes.

Circle number 6 on reader response card.

#### Nucleic acid preparation

The new **QIAvac 24** vacuum manifold from **QIAGEN** makes nucleic acid preparation faster and easier than ever before. The manifold holds up to 24 spin columns allowing convenient vacuum-driven transfer of samples and buffers. **QIAprep®** spin columns for plasmid minipreps and **QIAquick™** spin columns for DNA cleanup fit directly into the luer extensions of QIAvac 24. **QIAamp®** mini spin columns are processed on QIAvac 24 using special connectors to ensure contamination-free isolation of nucleic acids from clinical samples.

Circle number 7 on reader response card.